

REMARKS:

CLAIMS 1-8

In the electronic device of claim 1 as amended, unlike a conventional electronic device in which endpoints are statically assigned to each logical device, the controller of the present invention, every time it receives information from a host computer designating a desired logical device, selects required endpoints and connects them to the designated logical device, thereby enabling the shared use of endpoints and therefore enabling miniaturization of the electronic device.

The Examiner indicated in the Office Action that Siddappa taught claim 1. However, in the USB device disclosed in Fig. 10 and the Background Art of Siddappa, the endpoints are statically assigned to a function or device software 18, as is clear from Fig. 10 and the description of the Background Art (especially, P1, L33-35, and P2, L37-P3, L3). Therefore, Siddappa is silent about the limitation to enabling the shared use of endpoints, which is newly recited in amended claim 1.

Also, the Examiner indicated in the Office Action that the SHARP reference ("SHARP") taught claim 1, citing paragraphs 1-7, page 7 of Sharp. However, as stated in paragraph 1 of SHARP, an endpoint used for IrDA control devices is the same as that of USB as a concept, but it is not a physical endpoint as in USB. Accordingly, the meritorious effect of the present invention, namely miniaturization of the device, cannot be achieved by SHARP.

Lastly, the Examiner cited USB Specification and rejected claims 1-8. However, Fig. 5-8 of the Specification only shows that software on the host communicates with a USB logical device via a collection of endpoints. The figure does not show the limitation to sharing endpoints of amended claim 1.

CLAIMS 9-23

Applicants have added new claims 9-23. As recited in these new claims, multiple logical devices are all recognizable under one USB address. At the service request from the host computer, a logical device appropriate to provide the requested service is selectively connected to the USB to provide the service to the host computer.

If necessary, the endpoints in the USB are reconfigured to effect the communication between the host computer and the selected device.

On the other hand, in the cited references, a USB and a connected device always have fixed relationship between them. In other words, the cited references are all silent about dynamically connecting one or more endpoints to a logical device adapted to provide the request service.

Respectfully submitted,



Tadashi Horie
Registration No. 40,437
Attorney for Applicant(s)

BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610
(312) 321-4200